receiving a packet from a first network device to a second network device, wherein the first and second network devices are connected to form a link, the first network device and the second network device each having a version of a dynamic, intradomain, distributed, flat, single path, distance vector routing protocol, the packet identifying the first network device's routing protocol version

110

determining whether the first network device's routing protocol version is the same as the second network device's routing protocol version

120

configuring the link such that the routing protocol versions of the first and second network devices are the same

130

detecting the first network device's routing protocol type, and determining whether the first network device's routing protocol type is the same as the second network device's routing protocol type

140

configuring the link such that the routing protocol types of the first and second network devices are the same

150

100

FIG. 1

FIG. 2

200

START

Port UP,
save RIP version detection time,
save RIP type detection time — 211

210

RIP packet in receive queue — 213

YES

Get received packet — 215

219 — Choose next configuration and send packet to other side

NO

NO RIP packet received since Port Up and RIP type Timeout passed since last configuration change — 217

YES

220

DISABLED — RIP version autoconfiguration — 221 — ENABLED

223 — RIP packet version

Version 2 — Version 1

Version 2 configured — 227

NO

YES

Version 1 configured — 225

YES

NO

TRUE

RIP Packet version matches previously autoconfigured version — 231

FALSE

Check if RIP version detection time is longer than RIP Version Timeout — 233

YES

NO

Check if this is RIP Version 2 packet — 235

YES

Save RIP version detection time, Get version from packet and autoconfigure this version — 237

NO

240

DISABLED — RIP Type autoconfiguration — 241 — ENABLED

243 — Triggered RIP packet

YES (TRIGGERED)

NO (PERIODIC)

Triggered RIP — 245

DISABLED

ENABLED

Triggered RIP — 247

DISABLED

ENABLED

RIP packet type matches previously autoconfigured type — 251

FALSE

Check if RIP type detection time is longer than RIP type Timeout — 253

YES

TRUE

NO

Check if this is Triggered RIP packet — 255

YES

Save RIP type detection time. Get type from packet and autoconfigure this type. — 257

NO

Process this packet — 261

Reject this packet — 263

END